



# San Diego Regional Water Quality Control Board

Date:

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To:

Terry Fleming

Water Quality Standards Lead for Region 9 States, Tribes and Territories

United States Environmental Protection Agency

From:

David Gibson

**Executive Officer** 

Subject:

Clarification and Justification for Waterbodies in the San Diego Region

Placed into Category 4b of the Impaired Waters (303d) List

Section 303(d) of the Clean Water Act requires states to develop lists of water bodies impaired by a pollutant for which a Total Maximum Daily Load (TMDL) must be developed. U.S. EPA regulations recognize that by using other pollution control requirements, states may resolve the impairment without a TMDL. Waterbodies for which alternatives to TMDLs will be used to resolve the impairment are referred to as Category 4b waters as described in U.S. EPA's Integrated Reporting Guidance (IRG) for Section 303(d)<sup>1</sup>.

As part of the 2014/2016 Integrated Report, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) proposes to list nineteen waterbody segments as impaired by trash under Category 4b. The IRG requires states to demonstrate the suitability of placing waters in Category 4b by providing to U.S. EPA a rationale supporting their conclusion that there are "other pollution control requirements" sufficiently stringent to achieve applicable water quality standards within a reasonable period of time. All listings for trash under Category 4b utilize data collected by beach cleanup events along the Pacific Ocean (18) and Mission Bay (1) shorelines. Additional information regarding these trash listings has been provided below.

The San Diego Water Board would also like to clarify that the Santa Margarita River, which is impaired due to eutrophication, is incorrectly assigned within the California Water Quality Assessment Database as *Do Not Delist from 303(d) list (being addressed with action other than TMDL)*. This assignment in the California Water Quality Database is in error, as the Integrated Report adopted by the San Diego Water Board identifies eutrophication as a Category 5 – Alt (see Staff Report<sup>2</sup>, Table 6), which identifies the waterbody as impaired under Category 5 while acknowledging a TMDL Alternative is in process but not yet approved. It is unclear how the

<sup>&</sup>lt;sup>1</sup> Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act. Diane Regas (Director Office of Wetlands, Oceans and Watersheds). United States Environmental Protection Agency. July 29, 2005.

<sup>&</sup>lt;sup>2</sup> https://www.waterboards.ca.gov/sandiego/water\_issues/programs/303d\_list/docs/Staff\_Report\_101216.pdf

database obtained this erroneous classification, as outputs for the Integrated Report adopted by the San Diego Water Board did not classify the Lagoon as Category 4b. The San Diego Water Board has previously shared concerns with U.S. EPA regarding the limitations of the California Water Quality Assessment Database. The San Diego Water Board would again like to re-iterate the importance of resolving those issues before the next Integrated Report cycle in order to produce an accurate Integrated Report that does not waste significant staff time and resources on menial and inaccurate database tasks. The San Diego Water Board will, during the upcoming "off-cycle" Integrated Report, request that the State Water Resources Control Board correct the database error.

Additional Information for Trash Listings for U.S. EPA Category 4b

# 1. Identification of Segment(s) and Statement of Problem Causing the Impairment

The San Diego Water Board adopted an Integrated Report that listed nineteen waterbody segments (Table 1) as impaired by trash under Category 4b of the Impaired Waters List for the Integrated Report. All nineteen of these listing as impaired under Category 4b are new listings for the 2014/2016 Integrated Report.

Table 1. Trash-Impaired Waterbodies Placed into Category 4b of the Integrated Report

Table 1. Trash-Impaired Waterbodies Placed into Category 45 of the Integrated Report
Waterbody Segment
Mission Bay Shoreline, at Enchanted Cove
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)
Pacific Ocean Shoreline, Coronado HA, at G Ave, Central Beach
Pacific Ocean Shoreline, Imperial Beach Pier
Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth
Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset
Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street
Pacific Ocean Shoreline, Rancho Santa Fe HSA, at Powerhouse Park
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way
Pacific Ocean Shoreline, Scripps HA, at Belmont Park at Mission Beach (near San Fernando Place)
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier
Pacific Ocean Shoreline, Scripps HA, at North Lane at Windansea Beach
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Drive, Pacific Beach
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach
Pacific Ocean Shoreline, Torrey Pines State Beach, at North Beach Entrance parking lot

Data were not readily available to allow staff to evaluate all beneficial uses possibly impaired by trash. Data was collected by San Diego Coastkeeper, a not-for-profit non-governmental organization, as part of beach cleanup efforts. The beach cleanups documented the amount of trash collected on the beach, and gave a qualitative score of the amount of trash. Thus, the impairment assessment was focused on non-contact water recreation, and not wildlife habitat beneficial uses, because the non-contact recreational use could be most easily evaluated through the available trash data.

# 2. Description of Proposed Implementation Strategy and Supporting Pollution Controls Necessary to Achieve Water Quality Standards

The implementation strategy to achieve water quality standards (WQS) for the trash-impaired waterbodies listed above is to implement, through National Pollutant Discharge Elimination System (NPDES) permits and other regulatory mechanisms, the Amendments to the Water Quality Control Plan for Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries of California (collectively the "Trash Amendments")<sup>3</sup>. The Trash Amendments contain implementation procedures to achieve and maintain WQS for trash including institutional controls such as increased litter reduction, street sweeping, and capture of trash in storm water systems.

The Trash Amendments do the following: (1) establish a narrative water quality objective for trash; (2) define the applicable waters; (3) establish a prohibition on the discharge of trash; (4) provide implementation requirements for permitted storm water and other discharges; (5) set a time schedule for compliance; and (6) provide a framework for monitoring and reporting requirements.

The trash discharge prohibition applies to NPDES permits, Waste Discharge Requirements (WDRs), and waivers to WDRs. Stormwater permittees covered by municipal separate storm sewer system (MS4) permits may achieve compliance through the installation of full capture devices on all storm drains serving priority trash generating land uses. Alternatively, these stormwater permittees may achieve compliance through any combination of full capture devices, multi-benefit projects, other treatment controls and/or institutional controls, so long as it can be established through monitoring that they meet the same level of treatment as installation of full capture devices in all priority land use areas. These implementation measures will reduce the impacts from trash in California waters through permit requirements. Increased and standardized monitoring and assessment requirements for trash will track impairment in state waters due to trash, while documenting improvements associated with trash implementation measures.

# Trash Provisions of the San Diego Regional MS4 NPDES Permit

The primary regulatory mechanism for implementing the Trash Amendments in the San Diego Region is the Municipal Regional Stormwater Permit for MS4s (Regional MS4 Permit, Order No. R9-2013-0001, and its subsequent amendments). The nineteen trash-impaired waterbodies in Table 1 are all contained within municipalities that are Regional MS4 Permittees.

On June 2, 2017, San Diego Water Board Executive Officer David Gibson signed Order No. R9-2017-0077, An Order Directing the Owners and Operators of Phase I Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region to Submit Reports Pertaining to the Control of Trash in Discharges from Phase I MS4s to Ocean Waters, Inland Surface Waters, Enclosed Bays, and Estuaries in the San Diego Region. Order No. R9-2017-0077 implements amendments made in April 2015 by the State Water Resources Control Board to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan). Pursuant to the Trash Amendments, the San Diego Water Board

<sup>3</sup> These amendments were adopted by the California State Water Resources Control Board (State Water Board) as Resolution 2015-0019 on April 7, 2015, and approved by U.S. EPA Region 9 on January 12, 2016.

issued Order No. R9-2017-0077 with a <u>Transmittal Letter</u> to the owners and operators of Phase I MS4s (MS4 permittees) in the San Diego Region.

Order No. R9-2017-0077 (Final Order<sup>4</sup>) is the final version of Tentative Order No. R9-2016-0205 (Tentative Order). The Tentative Order was circulated for a 34-day public review and comment period ending on December 14, 2016. In response to comments received during the written comment period, the San Diego Water Board staff made revisions to the Tentative Order. The Final Order contains the implementation provisions, monitoring requirements, and scheduling for achieving water quality standards.

# **Trash Implementation Measures for Caltrans**

California Department of Transportation (Caltrans) designs and operates California's state highway system. Caltrans' operation of this linear transportation system requires that it have its own NPDES stormwater permit distinct from the MS4 permits for municipalities with regulatory authority over land uses. Based on information from Caltrans' trash studies, the Trash Amendments focus Caltrans' compliance efforts on the significant trash generating areas within the state's linear transportation system. Significant trash generating areas may include areas such as the following: (1) highway on and off- ramps in high-density residential, commercial, mixed urban, and industrial land uses; (2) rest areas and park-and-rides; and (3) state highways in commercial and industrial land uses. To comply with the prohibition of discharge of trash, Caltrans must comply with trash capture requirements in all significant trash generating areas by installing, operating, and maintaining any combination of full capture systems, multi-benefit projects, other treatment controls, and/or institutional controls. Caltrans must demonstrate that such combination of controls achieves full capture system equivalency.

The Trash Amendments (Appendix D of the Ocean Plan Chapter III.L.2.b and Appendix E of the ISWEBE Plan Chapter IV.A.3.b) require that Caltrans and MS4 permittees coordinate their efforts to install, operate, and maintain full capture systems, multi-benefit projects, other treatment controls, and/or institutional controls in significant trash generating areas and/or priority land uses.

### 3. Reasonable Schedule for Implementing Necessary Pollution Controls

Order No. R9-2017-0077 contains the requirements for scheduled implementation of needed pollution controls under the Regional MS4 Permit. These trash listings are new listings under the Integrated Report, which coincides with the issuance of Order No. R9-2017-0077, therefore impairments due to trash will be a priority condition for permittees to address via required implementation of pollution controls.

### 4. An Estimate of the Timeline for Achieving WQS

The trash impairment determinations were based on evidence from beach trash surveys that trash levels were impairing the non-contact recreation beneficial uses. We will consider WQS attained when trash levels in waterbodies have been reduced to the point where these (and presumably by extension other) uses are not impaired. This demonstration will require the collection and review of water quality monitoring data using standardized methods that document trash is not coming from regulated discharges.

https://www.waterboards.ca.gov/sandiego/board\_decisions/adopted\_orders/2017/R9-2017-0077.pdf

The trash in creeks and on beach shorelines is often material that has been transported from watershed source areas relatively recently (days to months) during storm events or illicit discharges. Therefore, we expect that achieving the trash reduction goals in the time period set forth under Order No. R9-2017-0077<sup>5</sup> will result in achievement of WQS (no impairment of noncontact recreation beneficial uses) in roughly the same timeframe, as trash BMPs will remove point sources of trash from surface waters.

# 5. Monitoring Plan to Track Effectiveness of Pollution Controls

In accordance with the Trash Amendments, the Water Boards must include monitoring and reporting requirements (with monitoring objectives) in MS4 and Caltrans storm water permits to ensure adequate trash control. The requirements in the final Trash Amendments represent the minimum requirements to be included in such permits. Monitoring requirements for the Regional MS4 Permit are included within Order No. R9-2017-0077.

The Caltrans permit contains requirements that Caltrans develop and implement annual monitoring plans that demonstrate the effectiveness of the selected combination of treatment and institutional controls and compliance with full capture system equivalency. The annual monitoring reports would be provided to the State Water Board and the reports must include a GIS map with the locations of each of the treatment controls and institutional controls. In addition to the GIS map, each annual monitoring report should consider a number of questions designed to demonstrate the effectiveness of the selected controls and compliance with full capture system equivalency.

**6. Commitment to Frequently Review and Revise Pollution Controls, as Necessary**Resolving trash impairments will be challenging but not impossible. Many of the control measures (full trash capture, enforcement, trash containment) are straightforward and their success is limited only by the will to implement and available resources. Managing the contribution from homeless encampments, illegal dumping, and simple improper disposal by the public in beach areas will be more difficult, but there are strategies for addressing these as well.

The use and evolution of novel strategies, such as bird-proof trash receptacles in beach areas, may be necessary as we find out what works and what does not. Since the primary mechanisms for implementing the Trash Provisions are the Regional MS4 Permit and Caltrans Permit, there is an established process for reviewing and revising pollution controls through permit re-issuance every five years.

The San Diego Water Board has a plan for control measure implementation through the Regional MS4 Permit that will result in trash reductions over the next few years, and requires communication with Caltrans on priority areas, such as those listed as impaired under Category 4b in the Integrated Report. In addition, there will be continued evaluation of receiving water monitoring, both from permittee and external monitoring groups, and results will both guide and measure progress toward goals. How reality matches goals will determine if additional or different control measures should be put in place through the regulatory mechanisms available to the San Diego Water Board. The San Diego Water Board is committed to solve the trash problem, and we will use the reissuance of these and other regulatory measures as an opportunity to fine tune implementation measures needed to protect beneficial uses.

<sup>&</sup>lt;sup>5</sup> See Finding No. 10 in Order No. R9-2017-0077.